

Serial No. 10/707601

5

(GEMS 0229 PA)

**Claim Rejections**

Claims 1-4, 6, 9, 11, 13, 14,16, 18, and 19 were rejected under 35 USC 103(a) as being unpatentable over Matsumoto (US 4,413,355) in view of Berry (US 6,481,969). . Claims 5 and 15 were rejected under 35 USC 103(a) as unpatentable over Matsumoto and Berry in view of Hansen (2002/0191749 A1). Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto, Berry and Wakita (US 6,341,600). Claim 10 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto and Berry in further view of Siebolds (2002/0020315 A1). Claim 12 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto and Berry in further view of Barber (US 4,842,485). Claims 1-4,6,13,14, and 17-20 were rejected under 35 USC 103(a) as being unpatentable over Matsumoto in view of Suzuki (US 6,449,000). Claims 5 and 15 were rejected under 35 USC 103(a) as unpatentable over Matsumoto and Suzuki in further view of Hansen (2002/0191749 A1). Claim 8 rejected under 35 USC 103(a) as being unpatenable over Matsumoto, Suzuki, and Wakita. Claim 12 was rejected under 35 USC 103(a) as being unpatenable over Matsumoto and Suzuki in further view of Barber.

**Claims 1-4, 6, 9, 11, 13, 14,16, 18, and 19 were rejected under 35 USC 103(a)**

Claims 1-4, 6, 9, 11, 13, 14,16, 18, and 19 were rejected under 35 USC 103(a) as being unpatentable over Matsumoto (US 4,413,355) in view of Berry (US 6,481,969). The Applicant respectfully traverses this rejection and requests reconsideration in light of the following arguments.

The Applicant traverses the underlying rejection. As will be repeated throughout this office action, the Applicant notes that none of the cited art that is directed towards x-ray tube targets mentions in any way the use of additive weights to balance the target. Although the Examiner has dismissed such an argument stating that it is his belief that the references are reasonably pertinent to the field of endeavor, The Applicant disagrees. However, what the Examiner has failed to do provide sufficient support for an obviousness rejection.

MPEP 706.02(j) and 2143 requires that, to establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations.

Serial No. 10/707601

6

(GEMS 0229 PA)

See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Rejections of obviousness must be based upon objective evidence of record and must be supported by particular findings as to why a skilled artisan, with no knowledge of the claimed invention, would have selected the specific components for combination in the manner claimed. In order for any prior art references themselves to be validly combined for use in an obviousness rejection under 35 U.S.C. §103, the references, or some other piece of prior art, must suggest that they be combined. *In Re Sernaker*, 217 USPQ 1, 6 (Fed. Cir. 1983). That is, the suggestion to combine the references must not come from the applicant's proposed invention itself. *Orthopaedic Equipment Co. vs. United States*, 217 USPQ 193, 199 (Fed. Cir. 1983). In order to establish a *prima facie* case of obviousness, it is necessary to present evidence in the form of some teaching, suggestion, incentive, or motivation in the applied prior art that one of ordinary skill in the art would have been lead to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex Parte Levengood*, 28 USPQ2d 1300-1301, 1302 (BPAI 1993). ("That which is within the capabilities of one skilled in the art is not synonymous with obviousness.") The focus must remain on what the prior art suggested to one of skill in the art at the time the invention was made.

Yet no motivation to combine can be found in any of the references. Matsumoto's specification fails to address/discuss or even passing reference the concept of balancing the target assembly. Post manufacture mechanical balancing is neither discussed nor suggested. Where would the suggestion or motivation lie to apply techniques utilized in the alternate references. Similarly, no motivation or suggestion is present in Berry to utilize its teachings for application within anything similar to the extreme tolerance medical imaging components claimed by the present application. No discussion or implication suggests its application to a medical component subject to the intense heat, strain, and violent temperature changes resultant from being bombarded with electrons within an x-ray tube. The only suggestion to combine comes from the Applicant's application which the Federal Circuit has found impermissible. *Orthopaedic Equipment Co.*

The Applicant, therefore, requests reconsideration.

Serial No. 10/707601

7

(GEMS 0229 PA)

**Claims 5 and 15 was rejected under 35 USC 103(a)**

Claims 5 and 15 were rejected under 35 USC 103(a) as unpatentable over Matsumoto and Berry in view of Hansen (2002/0191749 A1). The Applicant respectfully incorporates the aforementioned traversal regarding the lack of proper motivation or suggestion to combine in the Matsumoto and Berry references. In addition, the Applicant respectfully traverses this rejection. The Examiner has included the Hansen reference simply as it discloses the fact that it discloses a target assembly having a central neck element. The Applicant is unclear how these references can be combined to render the claims obvious. No motivation or suggestion is included in any reference to teach or suggest mounting a balancing circumferential feature onto the central neck portion of an x-ray tube target assembly. No motivation can be found in Hansen which again fails to teach or discuss the use mechanical additive balance structures. The only reference to balance stems from the dynamic balancing of the bearing assemblies and the material make up. Neither of these mentions within the Hansen reference provide any suggestion or motivation to forming balancing features onto the central neck portion of an x-ray tube target assembly. Nor do they provide any motivation or suggestion to utilize additive mechanical structures to effectuate balancing. Neither does, again, the discussion in Berry suggest mechanical additive balancing usage on the medical imaging x-ray tube target assemblies. Therefore, the present rejection is improper and a request for consideration is hereby requested.

**Claim 8 was rejected under 35 USC 103(a)**

Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto, Berry and Wakita (US 6,341,600). The Applicant respectfully incorporates his arguments regarding the improper combination of Matsumoto and Berry. Furthermore, the Applicant further notes that even by including Wakita there still has been no evidence short of the present application of any motivation or suggestion to combine any of these references. The Applicant has further amended the present claim in order to further clarify the issues. However, the Applicant firmly believes that no proper motivation or suggestion to combine has been established by the Examiner and therefore the rejections should be reconsidered.

Serial No. 10/707601

8

(GEMS 0229 PA)

**Claim 10 rejected under 35 USC 103(a)**

Claim 10 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto and Berry in further view of Siebolds (2002/0020315 A1). The Applicant respectfully incorporates the aforementioned arguments regarding Matsumoto and Berry. Furthermore, the Applicant calls the Examiner's attention to the fact that Siebolds provides no motivation or suggestion to combine with the additional references in order to be applied to a circumferential feature formed within a x-ray target element. Indeed, none of the cited arts make any reference to forming any features into the target element with regards to balancing or even discuss concern or motivation to do any post-installation balancing of the target assembly. The Applicant therefore requests reconsideration.

**Claim 12 rejected under 35 USC 103(a)**

Claim 12 was rejected under 35 USC 103(a) as being unpatentable over Matsumoto and Berry in further view of Barber (US 4,842,485). The Applicant respectfully reasserts his position on the inapplicability of the Matsumoto and Berry references. In addition, the Barber reference provides no such motivation or suggestion missing from the underlying references. The Barber reference is directed solely to balancing a rotor of a turbine. No suggestion is made or motivation found to prompt one skilled in the art to begin to allow fine tune mechanical balancing of x-ray tube target assemblies. The rejection is improper for failure to establish a proper motivation or suggestion within the prior art references.

**Claims 1-4,6,13,14 and 17-20 were rejected under 35 USC 103(a)**

Claims 1-4,6,13,14, and 17-20 were rejected under 35 USC 103(a) as being unpatentable over Matsumoto in view of Suzuki (US 6,449,000). The Applicant respectfully traverses this rejection. The Applicant traverses the underlying rejection. As will be repeated throughout this office action, the Applicant notes that none of the cited art that is directed towards x-ray tube targets mentions in any way the use of additive weights to balance the target. Although the Examiner has dismissed such an argument stating that it is his belief that the references are reasonably pertinent to the field of endeavor. The Applicant disagrees. However, what the Examiner has failed to do provide sufficient support for an obviousness rejection.



Serial No. 10/707601

9

(GEMS 0229 PA)

MPEP 706.02(j) and 2143 requires that, to establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations. See *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Rejections of obviousness must be based upon objective evidence of record and must be supported by particular findings as to why a skilled artisan, with no knowledge of the claimed invention, would have selected the specific components for combination in the manner claimed. In order for any prior art references themselves to be validly combined for use in an obviousness rejection under 35 U.S.C. §103, the references, or some other piece of prior art, must suggest that they be combined. *In Re Sernaker*, 217 USPQ 1, 6 (Fed. Cir. 1983). That is, the suggestion to combine the references must not come from the applicant's proposed invention itself. *Orthopaedic Equipment Co. vs. United States*, 217 USPQ 193, 199 (Fed. Cir. 1983). In order to establish a *prima facie* case of obviousness, it is necessary to present evidence in the form of some teaching, suggestion, incentive, or motivation in the applied prior art that one of ordinary skill in the art would have been lead to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. *Ex Parte Levengood*, 28 USPQ2d 1300-1301, 1302 (BPAI 1993). ("That which is within the capabilities of one skilled in the art is not synonymous with obviousness.") The focus must remain on what the prior art suggested to one of skill in the art at the time the invention was made.

Yet no motivation to combine can be found in any of the references. Matsumoto's specification fails to address/discuss or even passing reference the concept of balancing the target assembly. Post manufacture mechanical balancing is neither discussed nor suggested. Where would the suggestion or motivation lie to apply techniques utilized in the alternate references. Similarly, no motivation or suggestion is present in Suzukito utilize its teachings for application within anything similar to the extreme tolerance medical imaging components claimed by the present application. No discussion or implication suggests its application to a medical component subject to the intense heat, strain, and violent temperature changes resultant from being bombarded with electrons within an x-ray tube. The only

Serial No. 10/707601

10

(GEMS 0229 PA)

suggestion to combine comes from the Applicant's application which the Federal Circuit has found impermissible. *Orthopaedic Equipment Co.*

The Applicant, therefore, requests reconsideration.

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Serial No. 10/707601

11

(GEMS 0229 PA)

clarify the issues. However, the Applicant firmly believes that no proper motivation or suggestion to combine has been established by the Examiner and therefore the rejections should be reconsidered

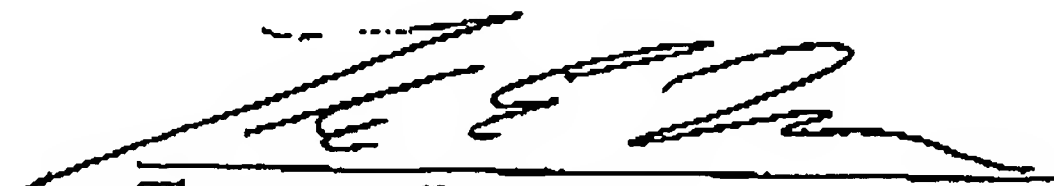
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Claim 12 was rejected under 35 USC 103(a) as being unpatenable over Matsumoto and Suzuki in further view of Barber. The Applicant respectfully reasserts his position on the inapplicability of the Matsumoto and Suzuki references. In addition, the Barber references provides no such motivation or suggestion missing from the underlying references. The Barber reference is directed solely to balancing a rotor of a turbine. No suggestion is made or motivation found to prompt one skilled in the art to begin to allow fine tune mechanical balancing of x-ray tube target assemblies. The rejection is improper for failure to establish a proper motivation or suggestion within the prior art references.

With this response, it is respectfully submitted that all rejections and objections of record have been overcome and that the case is in condition for allowance.

Should the Examiner have any questions or comments, he is respectfully requested to contact the undersigned.

Respectfully submitted,



Thomas E. Donohue  
Reg. No. 44,660  
Artz & Artz, P.C.  
28333 Telegraph Road, Suite 250  
Southfield, MI 48034  
(248) 223-9500  
(248) 223-9522 (Fax)

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